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IN THE CLAIMS

1-2. (canceled)

3. (currently amended): ~~The bearing system, as recited in claim 2~~ A bearing system, comprising:

a frame;

a shaft;

a rotor assembly mounted on the shaft;

at least one bearing supporting the shaft in the frame; and

a capacitance enhancement mechanism by which rotor to frame capacitance is increased, wherein the capacitance enhancement mechanism comprises a labyrinth, the labyrinth comprising a ground member, a shaft-voltage reducer, and one or more gaps disposed between the grounded member and the shaft-voltage reducer, wherein the one or more gaps are at least partially filled with dielectric material.

4. (original): The bearing system, as recited in claim 3, wherein the dielectric material is ionized to create a continuous path for current flow.

5. (currently amended): The bearing system, as recited in claim 2 3, wherein the ground member is adjacent to the shaft and the shaft-voltage reducer is mounted on the shaft.

6. (currently amended): The bearing system, as recited in claim 2 3, wherein a common mode voltage on the shaft is reduced by a scaling factor determined by the capacitive enhancement mechanism.

7. (canceled)

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8. (currently amended): The electromechanical device, as recited in claim 7
2, wherein the grounded member and the shaft-voltage reducer comprise a labyrinth.

9. (currently amended): ~~The electromechanical device, as recited in claim 7,~~
An electromechanical device comprising:

a housing coupled to a grounded member having an enhanced surface area;
a shaft rotatably mounted to the housing; and

a shaft-voltage reducer mounted for rotation with the shaft, the shaft-
voltage reducer having a corresponding surface configured to extend along the
enhanced surface area to reduce common mode voltage, wherein one or more gaps
are created between the grounded member and the shaft-voltage reducer and
wherein the one or more gaps are at least partially filled with a dielectric material.

10. (original): The electromechanical device, as recited in claim 9, further
comprising a rotor, wherein the grounded member and the shaft-voltage reducer comprise
a capacitive enhancement mechanism which increases rotor to frame capacitance.

11. (canceled)

12. (currently amended): The electromechanical device, as recited in claim 11
10, wherein the common mode voltage on the shaft is reduced by a scaling factor
determined by the capacitance enhancement mechanism.

13. (original): The electromechanical device, as recited in claim 12,
wherein the reduction of the common mode voltage reduces the incidence of bearing
current discharges to a harmless level.

14-15. (canceled)

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16. (currently amended): The system as recited in claim ~~15~~ 17, wherein the grounded member is adjacent to the shaft and the shaft-voltage reducer is mounted on the shaft.

17. (currently amended): ~~The system as recited in claim 15, further comprising~~ A system for reducing common mode voltage, comprising:
a pulse width modulated inverter producing a common mode voltage; and
a motor having:
a housing;
a stator assembly mounted to the housing;
a shaft;
a rotor assembly coupled to the shaft and rotatably mounted within the housing via at least one bearing;
a capacitive enhancement mechanism coupled between the housing and the rotor, the capacitive enhancement mechanism having a capacitor formed by a pair of enhanced surfaces that undergo relative movement, wherein the pair of enhanced surfaces are comprised of a grounded member and a shaft-voltage reducer and where one or more gaps are disposed between the grounded member and the shaft-voltage reducer; and
a dielectric lubricant disposed to circulate within the one or more gaps.

18. (original): The system as recited in claim 17, wherein the dielectric lubricant is ionized to create a continuous path for current flow.

19. (currently amended): The system as recited in claim 14 ~~17~~, wherein the common mode voltage on the shaft is reduced by a scaling factor determined by the capacitance enhancement mechanism.

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20. (original): The system as recited in claim 19, wherein the capacitance enhancement mechanism increases rotor to housing capacitance and where the scaling factor is a bearing voltage ratio where the denominator of the bearing voltage ratio increases as rotor to housing capacitance increases.

21. (original): The system as recited in claim 19, wherein the reduction of common mode voltage on the shaft reduces the incidence of bearing current discharges.

22. (canceled)

23. (currently amended): The method as recited in claim 22 26, further comprising reducing bearing current discharges.

24. (canceled)

25. (currently amended): The method as recited in claim 24 26, further comprising forming the enhanced surface areas into a labyrinth.

26. (currently amended): ~~The method as recited in claim 24, further comprising~~ A method of reducing detrimental bearing current discharges in a system having a rotor shaft rotatably mounted within a frame, comprising:

presenting enhanced surface areas between the rotor shaft and the frame;
adjusting the difference between the enhanced surface areas to increase rotor shaft to frame capacitance;
grounding one of the enhanced surface areas to the frame;
reducing rotor to ground voltage on the shaft during operation; and
arranging one or more gaps between the enhanced surface areas and at least partially filling the gaps with a dielectric material.

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27. (original): The method as recited in claim 26, further comprising ionizing the dielectric material to create a continuous path for current flow.

28-29. (canceled)

30. (currently amended): ~~The system, as recited in claim 29, comprising A~~
system for reducing voltage between elements of a rotating machine, the system
comprising:

a capacitive enhancement mechanism configured to be coupled between a
machine housing and a machine rotor, the capacitive enhancement mechanism
having a capacitor formed by a pair of enhanced surfaces that undergo relative
movement during operation, wherein the enhancement surfaces each comprise a
grounded member and a shaft-voltage reducer, and where one or more gaps are
disposed between the grounded member and the shaft-voltage member; and
a dielectric material disposed to circulate within the one or more gaps.

31. (previously added): The system, as recited in claim 30, wherein the dielectric material is ionized to create a continuous path for current flow.

32. (currently amended): The system, as recited in claim ~~28~~ 30, wherein a common mode voltage is reduced by a scaling factor determined by the capacitive enhancement mechanism.

33-34. (canceled)

35. (currently amended): ~~The system of claim 34, comprising A system for~~
reducing voltage between elements of a rotating machine, the system comprising:
a housing;
a stator assembly mounted within the housing;

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a shaft;

a rotor assembly coupled to the shaft and rotatably mounted within the housing via at least one bearing;

a capacitive enhancement mechanism coupled between the housing and the rotor, the capacitive enhancement mechanism having a capacitor formed by a pair of enhanced surfaces that undergo relative movement, wherein the enhancement surfaces each comprise a grounded member and a shaft-voltage reducer, and where one or more gaps are disposed between the grounded member and the shaft-voltage member; and

a dielectric material disposed to circulate within the one or more gaps.

36. (previously added): The system, as recited in claim 35, wherein the dielectric material is ionized to create a continuous path for current flow.

37. (currently amended): The system, as recited in claim ~~33~~ 35, wherein a common mode voltage is reduced by a scaling factor determined by the capacitive enhancement mechanism.